

Claims

What is claimed is:

1. An automated invoice management system for operation with a plurality of vendor client systems and at least one payer client system, the automated invoice management system comprising:
 - a network circuit for communicating invoice management data with the plurality of client systems.
 - a session management engine comprising:
 - means for establishing a secure session with at least a first vendor client system and with at least one payer client system through the network circuit;
 - means for receiving a first vendor invoice transaction compliant with a first vendor client transaction definition from the first vendor client system that includes identification of the payer client associated with the payer client system and amounts due from the payer client; and
 - a translation engine comprising:
 - means for translating the first vendor invoice transaction to a normalized invoice transaction; and
 - means for translating the normalized invoice transaction to an export invoice transaction compliant with a payer client transaction definition.
2. The automated invoice management system of claim 1, further comprising a database and wherein the session management engine further comprises means for storing the normalized invoice transaction in the database.
3. The automated invoice management system of claim 2, further including a data mapping dictionary that associates an element in the normalized transaction to at least a portion of an element in the vendor first client transaction definition and at least a portion of an element in the payer client transaction definition.

1 4. The automated invoice management system of claim 3, wherein:
2 the data mapping dictionary further includes validation rules; and
3 the translation engine further comprises means for validating the normalized
4 transaction by determining whether each element in the normalized transaction
5 complies with the validation rules.

1 5. The automated invoice management system of claim 3, wherein the data
2 dictionary further includes import mapping rules comprising:
3 rules that provide for associating at least one of the normalized element to a
4 particular portion of an element in the vendor client transaction definition;
5 rules that provide for truncating a portion of an element in the vendor client
6 transaction definition to comply with transaction format rules of a corresponding
7 normalized field; and
8 rules that provide for adding default characters to an element in the vendor client
9 transaction definition to comply with transaction format rules of a corresponding
10 normalized field.

1 6. The automated invoice management system of claim 5, wherein the data
2 dictionary further includes export mapping rules comprising:
3 rules that provide for associating at least one of the normalized elements to a
4 particular portion of an element in the payer client transaction definition;
5 rules that provide for truncating a portion of at least one of the normalized
6 element to comply with transaction format rules of a corresponding element in the payer
7 client transaction definition; and
8 rules that provide for adding default characters to at least one of the normalized
9 elements to comply with transaction format rules of a corresponding element in the
10 payer client transaction definition.

1 7. The automated invoice management system of claim 2, wherein the session
2 management engine further comprises:

means for receiving a payer remittance transaction compliant with a payer client remittance transaction definition from the payer client system that includes remittance data associated with the export invoice transaction;

means for translating the import remittance transaction to a normalized remittance transaction; and

means for translating the normalized remittance transaction to an export remittance transaction compliant with a first client remittance transaction definition.

8. The automated invoice management system of claim 2,
wherein the translation engine further comprises:

means for translating a second vendor invoice transaction, that complies with a second vendor client transaction definition that is different than the first vendor client transaction definition and that identifies the payer client and amounts due from the payer client, to a second normalized invoice transaction; and

means for translating the second normalized invoice transaction to a second export invoice transaction compliant with the payer transaction definition; and

wherein the session management engine further comprises:

means for receiving the second vendor invoice transaction from a second vendor client system; and

means for storing the second normalized invoice transaction in the database;

means for providing both the export invoice transaction and the second export invoice transaction to the payer client in a single file through the network circuit.

9. A method of providing automated invoice management services to a plurality of vendor client systems and at least one payer client system, the method comprising:

establishing a secure session with at least a first vendor client system and with at least one payer client system through a network circuit;

receiving a first vendor invoice transaction compliant with a first vendor client

6 transaction definition from a first vendor system that includes identification of a payer
7 client associated with the payer client system and amounts due from the payer;

8 translating the first vendor invoice transaction to a normalized invoice
9 transaction; and

10 translating the normalized invoice transaction to an export invoice transaction
11 compliant with a payer client transaction definition that is different than the vendor client
12 transaction definition.

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1 10. The method of providing automated invoice management services of claim 9,
2 further comprising:

3 storing the normalized invoice transaction in a database.

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6 11. The method of providing automated invoice management services of claim 11,
7 further comprising:

8 validating the normalized transaction by determining whether each of a plurality
9 of elements in the normalized transaction complies with validation rules.

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12 12. The method of providing automated invoice management services of claim 10,
13 wherein the step of translating the vendor invoice transaction to a normalized invoice
14 transaction comprises at least one of the following steps:

15 associating an element in the normalized transaction to a particular portion of an
16 element in the vendor client transaction definition;

17 truncating a portion of an element in the vendor client transaction definition to
18 comply with transaction format rules of a corresponding normalized element; and

19 adding default characters to an element in the vendor client transaction definition
20 to comply with transaction format rules of a corresponding normalized field.

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22 13. The method of providing automated invoice management services of claim 12,
23 wherein the step of translating the normalized invoice transaction to an export invoice
24 transaction compliant with a payer client transaction definition comprises at least one of

the following steps:

associating an element in the normalized transaction to a particular portion of an element in the payer client transaction definition;

truncating a portion of an element in the normalized transaction to comply with transaction format rules of a corresponding element in the payer client transaction definition; and

adding default characters to an element in the normalized transaction to comply with transaction format rules of a corresponding element in the payer client transaction definition.

14. The method of providing automated invoice management services of claim 10, further comprising:

receiving a payer remittance transaction compliant with a payer client remittance transaction definition from the payer client system that includes remittance data associated with the export invoice transaction;

translating the payer remittance transaction to a normalized remittance transaction; and

translating the normalized remittance transaction to an export remittance transaction compliant with a first client remittance transaction definition that is different than the payer client remittance transaction definition.

15. The method of providing automated invoice management service of claim 10, further comprising:

receiving a second vendor invoice transaction from a second vendor client system that complies with a second vendor client transaction definition that is different than the first vendor client transaction definition and that identifies the payer client and amounts due from the payer client;

translating the second vendor invoice transaction to a second normalized invoice transaction;

storing the second normalized invoice transaction in the database;

10 translating the second normalized invoice transaction to a second export invoice
11 transaction compliant with the payer transaction definition;
12 providing both the export invoice transaction and the second export invoice
13 transaction to the payer client in a single file through the network circuit
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